

JOHN G. YOUNGER

# AEGEAN SEALS OF THE LATE BRONZE AGE: STYLISTIC GROUPS

## IV. ALMOND- AND DOT-EYE GROUPS OF THE FIFTEENTH CENTURY B.C.\*

### Synopsis of Text

Prologue

Introduction

#### A. The Almond-Eye Group

1. The Tiryns Ring Group
2. The Group of the 'Vapheio Cup' Bulls
3. The Monumental Group
4. Knossian Bulls, Part I: The Tethered Bull Group
5. The Group of the Crystal Rings (I 20 and XIII 27)
  - i. Squirrel Eyes
  - ii. The Muzzle Group
6. Caprids from Isopata T. 3, Part I
7. The Contorted Bull Group
8. Miscellaneous Seals

\* In the text the plain citation of Roman and then Arabic numerals refers to the volumes and catalogued seals in the *Corpus der minoischen und mykenischen Siegel* (Berlin, 1964ff.). For abbreviations, see the Introduction, Kadmos 21, 1982, 104–5.

Add:

Betts 1967 = John H. Betts, "New Light on Minoan Bureaucracy," Kadmos 6, 1967, 15–40.

Masters, I = John H. Betts and John G. Younger, "Aegean Seals of the Late Bronze Age: Masters and Workshops. Introduction," Kadmos 21, 1982, 104–121.

Masters, II = John G. Younger, "Aegean Seals of the Late Bronze Age: Masters and Workshops. The First-Generation Minoan Masters," Kadmos 22, 1983, 109–136.

Masters III = John G. Younger, "Aegean Seals of the Late Bronze Age: Masters and Workshops. The First-Generation Mycenaean Masters," Kadmos 23, 1984, 38–64.

Papapostolou = I. A. Papapostolou, *Ta Sphragismata ton Khanion* (Bibliothèque des *en Athenais Archaïologikes Hetaireias* no. 7, Athens 1977).

The drawings in Figures 1–10 are numbered consecutively, and are cited in bold face, 1, 2, etc. The reader is cautioned that the figures constitute solely an aide-mémoire to stylistic features; more detailed understanding is given by the primary and secondary publications cited in the text.

#### B. The Dot-Eye Group

1. The Athens Minotaur Group
2. The Tragana Duelist Group
3. The Keos-Berry Lion Group
4. Knossian Bulls, Part II:
  - i. The Ayios Ioannes T. 3 Group
  - ii. The Wounded Bull Group
5. The Group of the Couchant Boars
6. The Lapidary's Workshop at Knossos
7. The Group of the Lions with Occipital Dots
8. The Group of the Running Calves
9. Caprids from Isopata T. 3, Part II
10. The Group of the Messy Ring
11. Dot-Eye Mumps
12. Miscellaneous Seals

### Illustrations

Text	Nr.	Ref.	Text	Nr.	Ref.
A	1	1 I 87	30	XIII 27	
	2	I 179	31	CS 296	
	3	NMA 1759	32	I 58	
	4	NMA 1759	33	V 673	
	5	NMA 1758	34	VII 87	
	6	I 238	35	XIII 7	
	7	CS 202	36	HM 166	
	8	HMs 101	37	AGDS II 23	
	9	I 274	38	VII 233	
	10	I 152	39	HM 908	
	11	I 185	40	I 93	
	12	HM 185	41	V 641	
	13	HM 609	42	HM 179	
	14	HMs 415	43	CS 7P	
3	15	VII 261	44	HMs 208	
	16	VIII 148	45	I 95	
	17	XII 237	46	HM 2301	
	18	XII 287	47	HMs 424	
	19	HM 170	7	48 V 32	
4	20	XII 249	49	V 319	
	21	XII 251	50	V 595	
	22	XIII 26	B	1 51 V 173	
5i	23	I 20	52	V 197	
	24	V 308	2	53 I 131	
	25	V 663	54	I 263	
	26	IX 125	55	V 130	
	27	IX 129	56	IX 154	
	28	CS 307	57	HM 1654	
5ii	29	XIII 10	3	58 V 192	

Text Nr. Ref.

- 59 V 498  
 60 V 680  
 61 VII 168  
 62 HM 839  
 63 V 374 314  
 64 I 183  
 65 XIII 13  
 4i 66 V 433  
 67 V 688  
 68 V 248 XII 248  
 69 HM 1656  
 70 HM 1658a  
 71 HM 1658b  
 4ii 72 V 645  
 73 V 646  
 5 74 V 666  
 75 IX 136  
 6 76 I 125  
 77 AM 1938. 1087  
 7 78 V 689  
 79 X 216  
 80 HM 561  
 81 HM 1712  
 8 82 I 122

Text Nr. Ref.

- 83 I 287a  
 84 I 287b  
 85 V 660  
 86 I 69  
 87 I 386  
 9 88 HM 909  
 89 I 99  
 90 VII 119  
 91 HM 165  
 92 HM 2384  
 93 AGDS II 44  
 94 I 61  
 95 I 92  
 10 96 I 90  
 97 V 732  
 11 98 I 59  
 99 VII 161  
 100 I 45  
 101 I 264  
 102 IV 256  
 103 VIII 107  
 104 X 217  
 105 IX 159  
 106 CS 322

Once again I wish to thank Dr Ingo Pini for his permission to reproduce drawings made for CMS (Nos. 1, 2, 6, 9–11, 15–18, 20–27, 29, 30, 32–35, 38, 40, 41, 45, 48–56, 58–61, 63–68, 72–76, 78, 79, 82–87, 89, 90, 94–105). Other illustrations are reproduced either from their primary publications or from other publications that are cited in the text. I am also grateful to John H. Betts for his drawings, Nos. 8 and 80. JGY drew the remaining figures from the photographs published in the primary publications or from those in the secondary sources that are cited in the text.

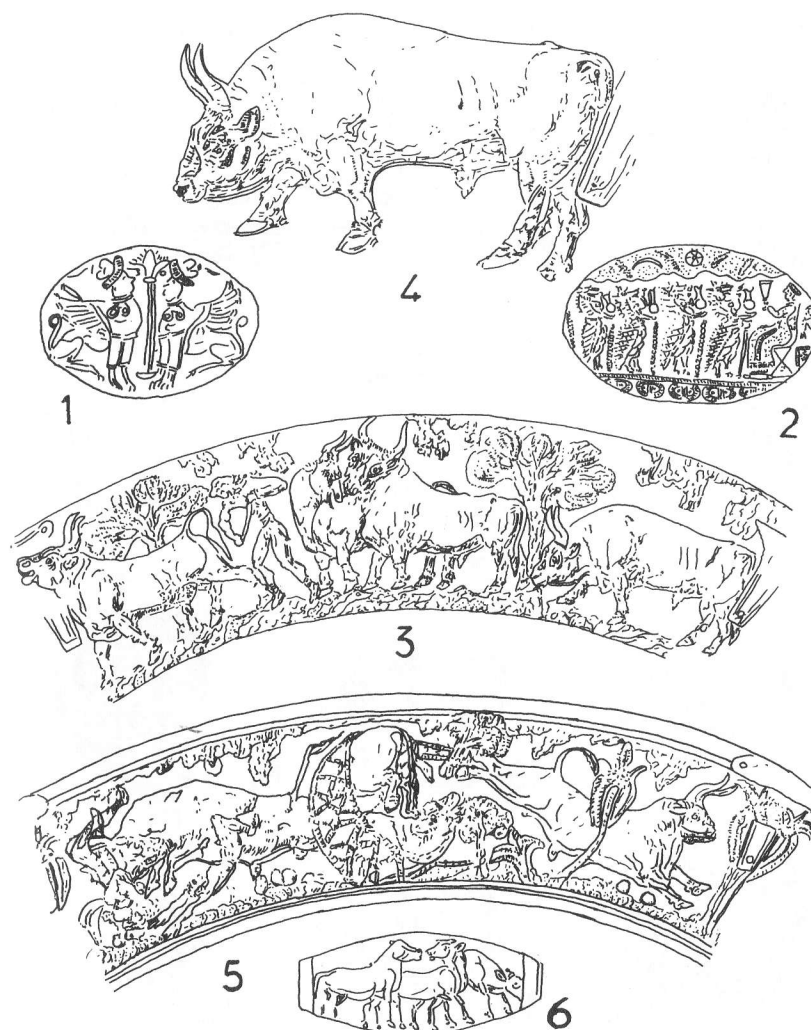


Fig. 1  
 1, 2: Tiryns Ring Group  
 3–6: Group of the 'Vapheio Cup' Bulls

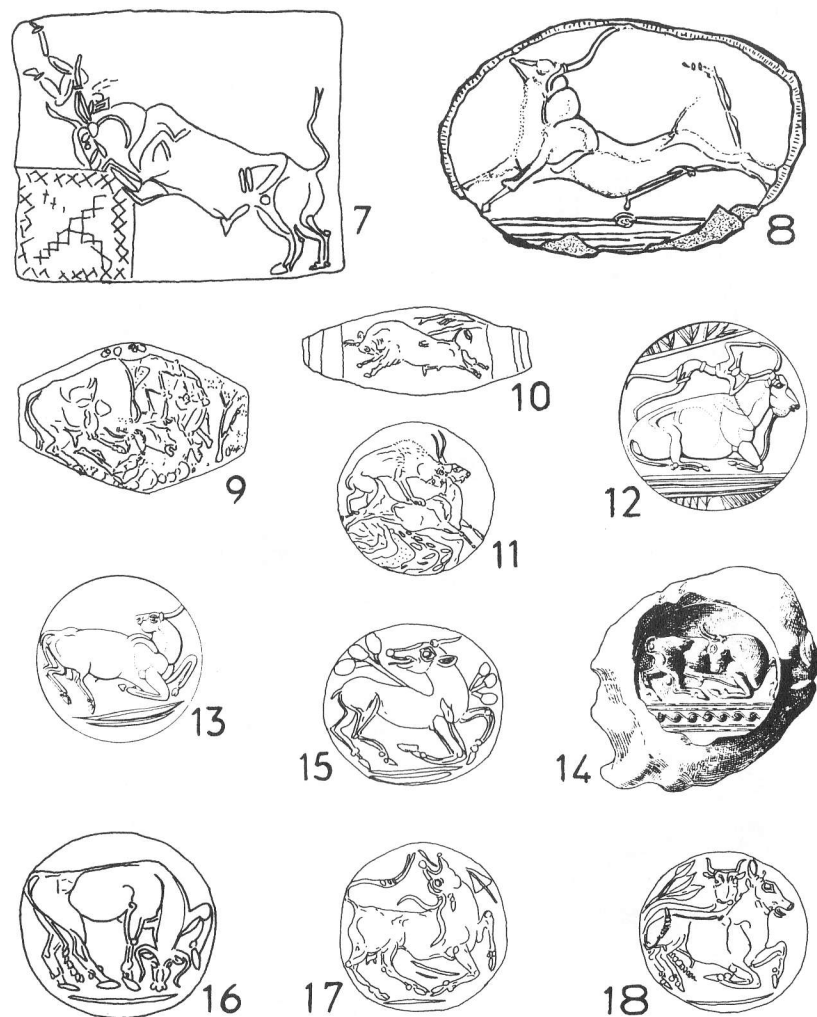


Fig. 2

7-14: Group of the 'Vapheio Cup' Bulls (cont.)

15-18: Monumental Group

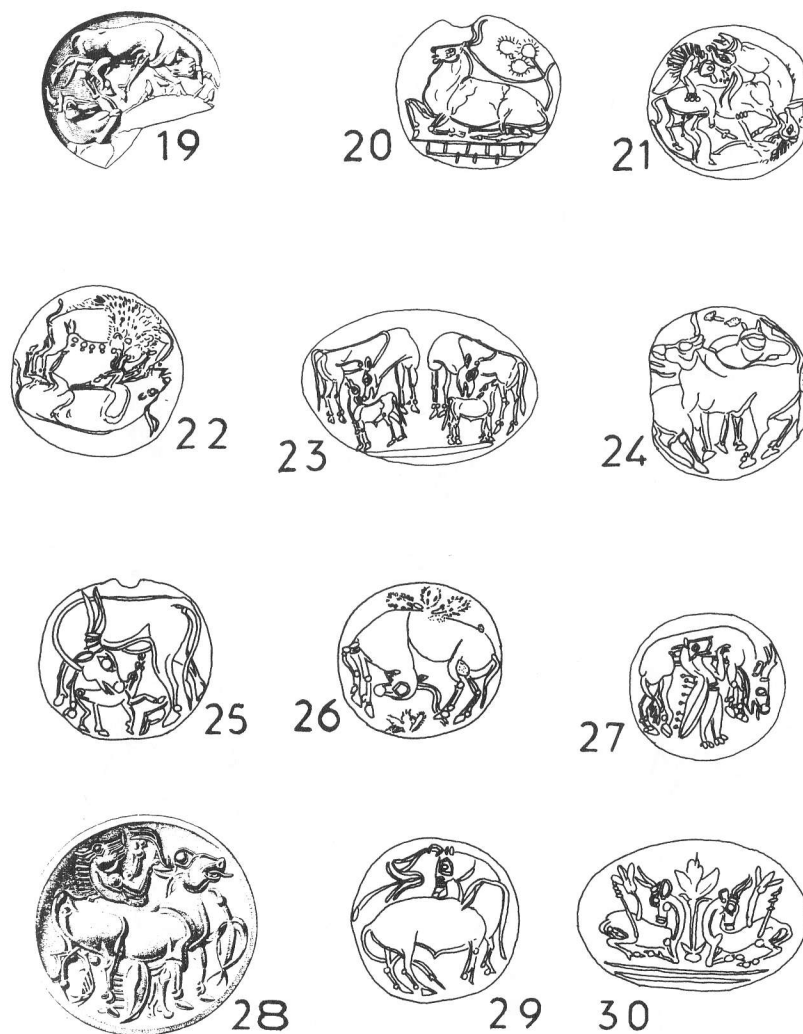


Fig. 3

19: Monumental Group (cont.)

20-22: Knossian Bulls I (Tethered)

23-28: Crystal Rings Group (Squirrel Eyes)

29-30: Crystal Rings Group (Muzzle Group)

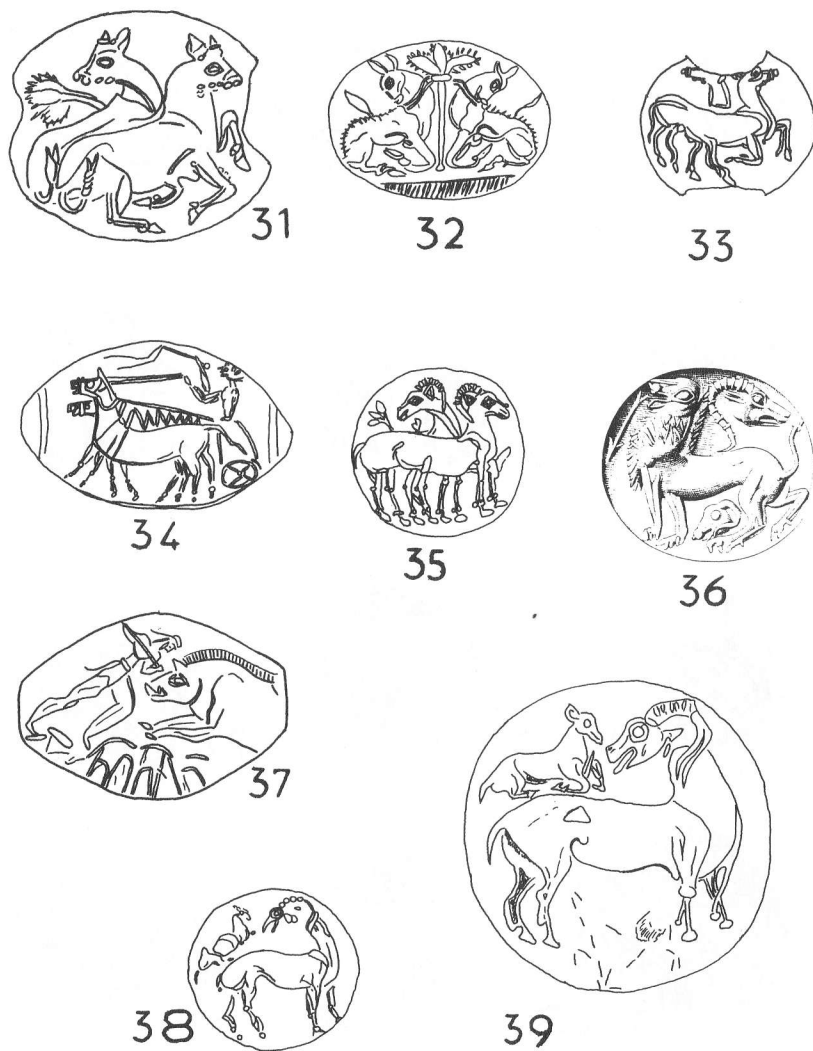


Fig. 4

31-37: Crystal Rings Group (Muzzle Group, cont.)  
38, 39: Caprids from Isopata I



Fig. 5

40-47: Caprids from Isopata I (cont.)  
48-50: Contorted Bull Group





Fig. 6  
 51, 52: Athens Minotaur Group  
 53–57: Tragana Duelist Group  
 58–61: Keos-Berry Lion Group

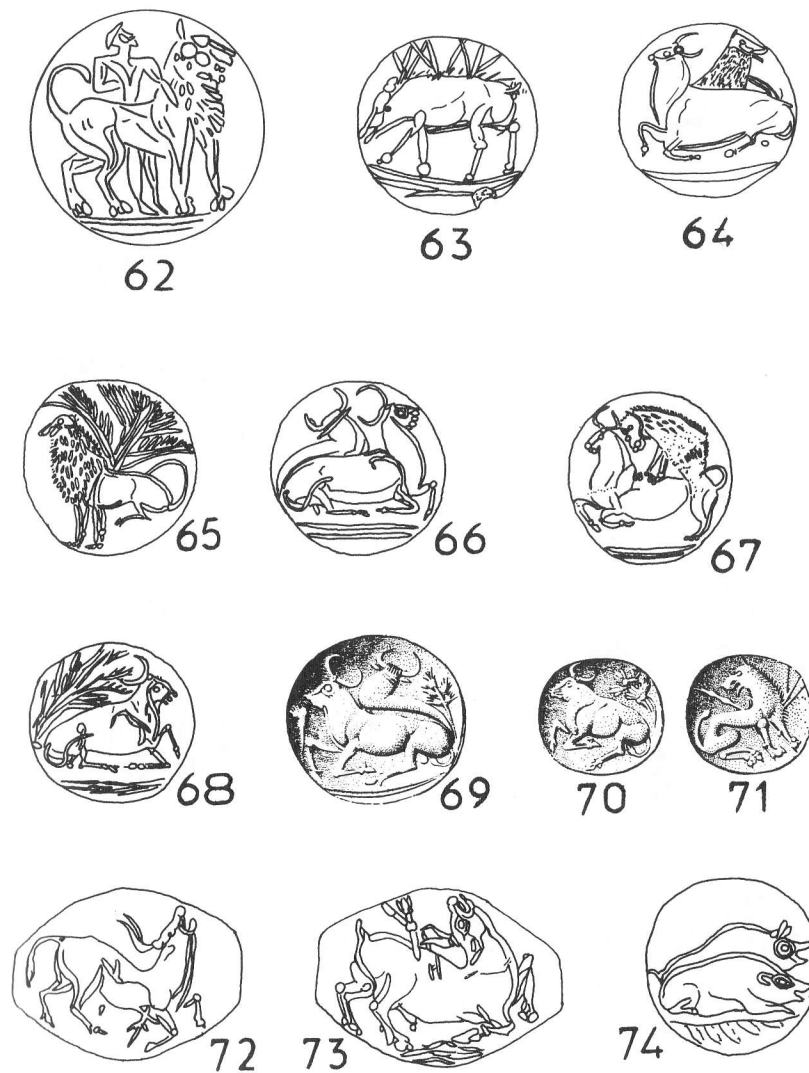


Fig. 7  
 62–65: Keos-Berry Lion Group (cont.)  
 66–71: Knossian Bulls II (Ayios Ioannes)  
 72, 73: Knossian Bulls II (Wounded)  
 74: Group of the Couchant Boars

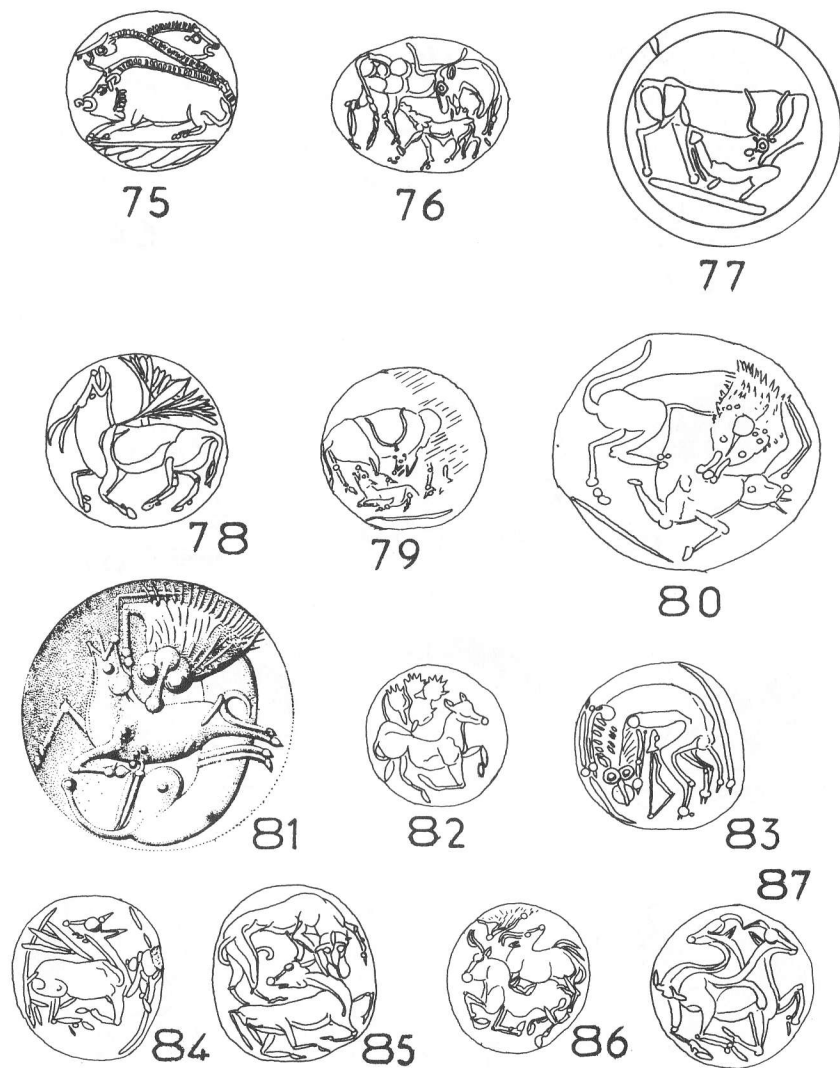


Fig. 8

75: Group of the Couchant Boars (cont.)

76, 77: Lapidary's Workshop, Knossos

78-81: Lions with Occipital Dots

82-87: Running Calves

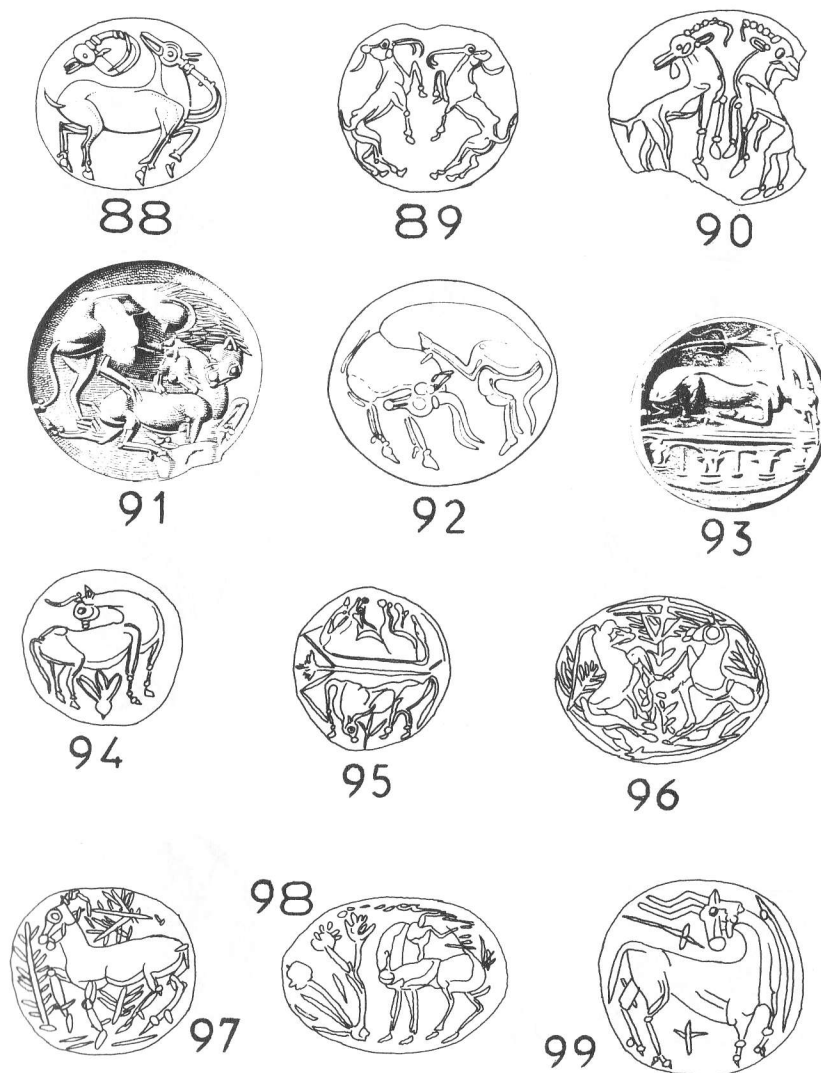


Fig. 9

88-95: Caprids from Isopata II

96, 97: Messy Ring Group

98, 99: Dot-Eye Mumps

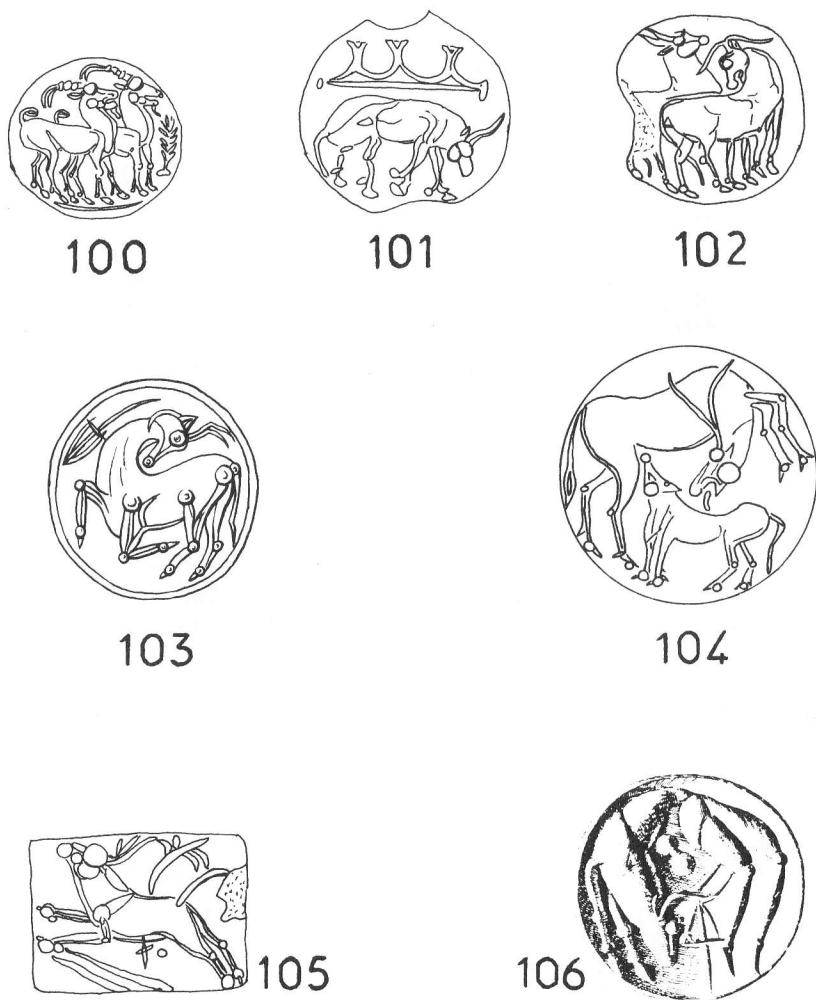


Fig. 10  
100-106: Dot-Eye Mumps (cont.)

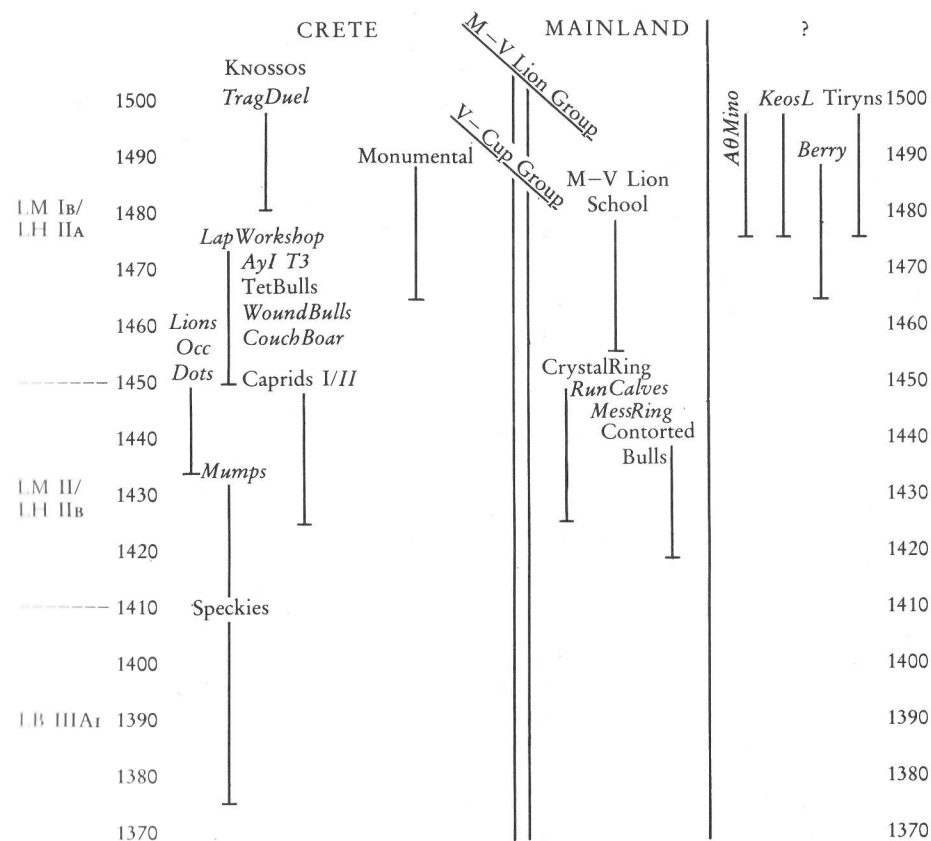


Fig. 11  
Chronological table

Names in roman are of Almond-Eye groups (except Speckies);  
those in italics are of Dot-Eye groups.

## Prologue

My readers may notice that the present contribution changes the title of this series from "Artists and Workshops" to "Stylistic Groups". This change is intended to announce a long-overdue shift in my thinking.

For over ten years, since 1972, much of my work has concerned the grouping of Late Bronze Age seals into stylistic groups. Four major factors led me to make the enthusiastic assumption that most of the groups I had assembled were the products of individuals or of closely-knit workshops: most of these groups do contain seals that are, I think, most probably by a single hand; John Betts produced similar such groups working independently; many of our groups can be fairly closely dated and their chronological order seems to produce a coherent glyptic development; and the level of artistry throughout this observed development is remarkably high.

The notion that most of these groups represent the work of individual artists has not received much support, mainly because most scholars are naturally sceptical about the possibility of discovering artists when the extant amount of their work is small.<sup>1</sup> A few years ago, I myself began to feel these doubts, though I still found it more convenient at the time to maintain the earlier terminology.

The major reasons for limiting now the use of this earlier terminology ('master', 'artist', 'workshop', etc.) are threefold. First, through the work of John Betts, Agnes Sakellariou, Ingo Pini, and Judith Weingarten,<sup>2</sup> it is fairly clear that several sealings once considered to have been impressed by the same seal might actually have been impressed by almost identical but nonetheless distinguishably different seals. A similar situation obtains for the moulded glass seals; as Pini has demonstrated,<sup>3</sup> several glass seals could be produced from the same mould but re-engraved after casting to produce slightly different sealtypes. Such observations raise questions: must one artist be responsible for the original seal (or the stone mould for glass seals) as well as for the copies, casts, and adaptations? or, could other artists, since the reproduction techniques were probably fairly simple and mechanical, have also been responsible for the 'second generation' seals?

Second, the number of extant sealtypes, about 4700, was presumed to approximate to the number of seals actually manufactured.<sup>4</sup> This was then, as it is now, just wishful thinking. The fact that very few extant sealstones, if any, might have impressed extant sealings<sup>5</sup> should have caused us to wonder: where now are the seals that impressed the

<sup>1</sup> Late Bronze Age sealtypes number approximately 4700 (Masters I, p. 112 fn. 21). The identification of approximately 40 pictorial vase painters has enjoyed some acceptance, however, in spite of the fact that the total number of pictorial vases comes to less than 900 (MycPictVP passim, and, for a summary of select vase-painters, JHS 103, 1983, 221-2).

<sup>2</sup> Betts, "New Light on Minoan Bureaucracy," *Kadmos* 6, 1967, 15-40; Sakellariou, "Hena Sphragisma apo ten Pylo," *Festschrift für Friedrich Matz*, 19-22; and Weingarten, *The Zakro Master and his Place in Prehistory*, SIMA Pocket-book 26.

<sup>3</sup> *JRGZM* 28, 1981, 48-81.

<sup>4</sup> Masters I, p. 115-117; note the corrigendum of 40 hours instead of 48 (p. 117, end of the first paragraph).

<sup>5</sup> E.g., AGDS II Berlin 21 to I Supp. 180 from Pylos; the 'clay matrix/cast/seal' Knossos KSPI Q22 to KSPI R1/R51/R54 and Kato Zakro KZ 3; CS 226 to an unpublished sealing from Knossos.

more than 600 extant sealings? Since the actual sealstones extant and the sealtypes found impressed on the extant sealings do not differ substantially in iconography or in style, we are forced to admit that we do not at all possess the majority of the Late Bronze Age seals manufactured, and therefore the total number of seals produced must be unimaginably high. John Betts, writing about the 25 seals, the one sealing, and a couple of unengraved (workshop?) pieces from the Minoan Unexplored Mansion, as well as the collection of seals from the excavations along the Royal Road, muses, "a projection of these numbers over the total area of the [Knossos] town site, even excluding the Palace and the cemeteries, runs to thousands of seals in use at any one time."<sup>6</sup>

Third, my criteria for determining style are often not specific enough to warrant exclusive attribution of an artifact to a specific individual. For instance, many of the traits I have used to identify works by the Mycenae-Vapheio Lion Master can also be found to some extent on the niello axe-blade and dagger that belonged to the Egyptian Queen Ah-hotep as well as on the gold ring from Enkomi T. 18 (Buchholz & Karageorghis, *Prehistoric Greece and Cyprus*, no. 1784). In like fashion, a single criterion can be observed in the work of two or more fifteenth-century groups (e.g., the Monumental Group and the group around Der Kretische Stier, discussed below and in Masters III, p. 58, respectively).

Recently my hesitancy about the identification of some artists resulted in some odd expressions: the Mycenae-Vapheio Lion Master apparently had distinguishable 'aspects' of his personality (Masters III, p. 53); obviously my terminology could not adequately express my own thinking. In the present contribution to this series I can now present large groups divided into smaller subgroups and leave the distinguishing of hands for another study.

While I have contemplated changing my terminology, therefore, for some time, the impetus to do so came in early July 1984 when John Betts, Ingo Pini, Helmut Jung, and I met in the offices of the CMS to discuss, among many matters, the stylistic groupings which John Betts and I had made. While we agreed, during this intimate symposium, that stylistic groupings of seals did indeed seem to provide the best hope for understanding their chronological development, the terms 'artist', 'workshop', and the like cannot, in many cases, be convincingly demonstrated at the moment. What surely must be done first is: to assemble the major stylistic groups (a stage in which we are, I think, fairly advanced); to describe them so that the definition of each group makes it clear why certain seals have been placed there; and then, finally, with the broad groups agreed upon, to sort out the identifiable hands.

With no regret, therefore, I shall now refocus my attention from the absorbing search for artists to the establishment of broad stylistic groups and subgroups and to their clearer definition.

Such a refocus certainly does not mean, however, that the work that has appeared in this series should be jettisoned or that the series itself should be abandoned; I regard most of the groups that have already appeared as still valid, insofar as these groups are precisely that: groups. The new terminology implies that the seals within each group are bound together in a relationship that is looser than if they were considered all by a single hand. The new groups allow for iconographic subdivisions and stylistic variations; it is con-

<sup>6</sup> Popham et al., *The Minoan Unexplored Mansion at Knossos*, pp. 192-3. Indeed Betts asks the question, "what proportion of original output survives? how many craftsmen were engraving seals at any one time? is the surviving corpus a sufficient proportion to allow us some chance of grouping seals by workshops or even individual artists?"

ceivable, for instance, that the Mycenaean-Vapheio Lion Master's 'guises' eventually can be merged within a larger Mycenaean-Vapheio Lion Group. A follow-up article at the end of this series specifying these changes will surely be in order.

In short, a nomenclature using 'group', 'subgroup', etc., will permit future scholars more flexibility to perceive the various stylistic relationships through both time and space, and to refine those relationships.

### Introduction

In our introductory article we basically equated an artist's style with his artistic personality, "the general shape of his animals and the tension between his reliance on his tools and his aim for naturalism" (Masters I, p. 118).

In the discussions of the late sixteenth- and early fifteenth-century B.C. stylistic groups, these two major approaches, the conventional and the naturalistic, became fairly clear. A simplistic style relying heavily on the unerased marks of the tools themselves arose early in Crete, and, toward the end of the sixteenth century, dominated the artists in the CP and L-J Lion Groups.

From this artistic circle, however, emerged the Mycenaean-Vapheio Lion Master, who adapted the work both of the engravers of stone vessels and of the sealstone artists responsible for the earlier Couchant Agrimi Group (to be treated in a later article, but I Supp. 92 and HM 1609 [Platon, Crete pl. 86] are two examples of this group). He and his school accentuated the anatomical emphasis of these artists into a highly powerful and formal style, by balancing his plastic modeling of massive bodies (e.g., the Pylos Jewel) with certain conventional traits, like the outlined pronounced shoulders, the bossed ulna, and a light use of the profile line (e.g., Hollow Nose and Der Kretische Stier). Even a single seal, like the brilliant AGDS II Berlin 34 (Masters, III: fig. 41) combines both approaches: the artist flays the lion's forelegs to reveal their skeletal and venal structure, but bedews the stag's horns with tiny dots and ermines the lion's tail-tip with three dots.

The artists of the fifteenth century, even those who did not join the M-V Lion Circle, also pursued these two approaches, the conventional and the realistic. To some extent it can be imagined, for the sake of convenience, that these artists took up stylistic sides: those favoring the anatomical approach gave their animals almond eyes, those preferring the simplistic approach gave them dot eyes.

By the end of the fifteenth century, however, the monumental tradition had clearly lost to the simplistic approach. The Spectacle-Eye Group of Knossos, ca. 1410–1375 B.C. (to be presented in the next

article in this series)<sup>7</sup> carries smoothly-modeled, elongated animals with dotted joints; the only prominent vestige of the alternative style can be seen in the spectacle-like ring which supplants the previous almond eye, a ring produced by the tubular drill. The large Island Sanctuaries Group,<sup>8</sup> which succeeds the Spectacle-Eye Group in the mid-fourteenth century, carries this formalizing trend even further.

It is not difficult to understand why the simpler stylistic approach managed not only to survive in the face of the more powerful and realistic manner but even to displace it. The small size of the sealface, the many tools for cutting the stone (e.g., the burin, the wheel, and the tubular drill) as opposed to the one modeling tool (the snub-nosed drill) for creating flowing surfaces, and the translucency of the popular materials (silicates like agate, amethyst, cornelian, chalcedony, etc.) all favor clear forms, crisp lines, and sharp transitions. When the realistic artists of the 'Vapheio Cup' Bulls (below) translated a massive bull from a fresco to the sealstone HM 185, the result is a tour-de-force illustration of bovine body-building in the impression, but on the agate stone itself the style is much less legible, even considering that the stone is preserved to us in a burnt condition; in antiquity the stone was either cornelian, or more probably an agate with translucent veins, some almost clear and others colored *café-au-lait*.

The majority of the fifteenth-century artists worked in compromises between the two approaches, regardless of whether they preferred an almond- or a dot-eye. The dot-eye group of the Ayios Ioannes T. 3 Bulls, or the almond-eye group Squirrel Eyes, retained the large bull-bodies introduced by the artists in the M-V Lion Circle, but reduced the musculature to a few broad and tight planes resembling crystalline facets, and then set off the whole body from the surface of the stone with profile lines. Lions, before they begin their rapid disappearance from the glyptic iconography,<sup>9</sup> also begin to lose their former power; the

<sup>7</sup> For Spectacle-Eyes, see Diss. 422–424. VII 98, IX 124, XIII 84, picked at random, are typical examples of the style. The date is supplied by the many LM/LH III A1 contexts in and about the palace of Knossos and from elsewhere: e.g., Kn HMs 118/KSPI 05, 121/N10, 219/R43; HM 2383 from Sellopoulo T. 4 (BSA 69, 1974, 195–257 fig. 14b), and 180 from Kalyvia T. 9 (MonAntichi 14, 1904, 501–666 fig. 10); and two lentoids from Prosymna T. 33 (Blegen, Prosymna 104–110 and 274–275 figs. 581 and 582).

<sup>8</sup> For the Island Sanctuaries Group, see Diss. 442; Papers in Cycladic Prehistory (Institute of Archaeology XIV, UCLA 1979) 97–105; CMS Beiheft 1, 1981, 263–272; Chapter 7 in A.C. Renfrew's forthcoming publication of the recent excavations at Phylakopi; and a subsequent article in this series.

<sup>9</sup> Of the ca. 475 Bronze Age (excluding the dependent forgeries) seal types catalogued in this article, 43 (10%) depict lions in combination with another figure and 19 (5%)



body becomes lankier, the mane larger and more bristly. The artists of the Keos-Berry Lions look at them as large, happy, stuffed toys; the artists of the Lions with Occipital Dots did not even look at them – to judge from the crude depictions.

Since the glyptic artists in the fifteenth century were not themselves especially clear about their predilections, either for technical simplicity or for anatomical realism, our categories for their work are likewise often somewhat imprecise, at least for the moment. The Bulls from Ayios Ioannes T. 3, a subgroup of the Knossian Bulls, are placed among the Dot-Eye Groups even though only one of its seals, V 433, outlines the eye-socket in a dot-eye fashion, whereas on the group's other seals it is left as a shallow depression; V 434, a true dot-eye, is placed close to the almond-eye Group of the Tethered Bull; and two groups of artists, those of the Knossian Bulls and of the Caprids from Isopata T. 3, appear to have been at home equally with almond-eye and dot-eye animals.

The distinction between the dot-eye and the almond-eye, therefore, is essentially a convenient way to break down what otherwise would be a rather amorphous and large group of similar seals; the distinction also reminds us that the choice – between technique (tool and material) and realism – seems to have occupied the thoughts of these artists more in the period 1475–1410 than in the generations that preceded or followed.

In spite of the problematic nature of this period, however, certain stylistic and chronological conclusions are inescapable. At the beginning of the fifteenth century the M-V Lion Master founded a Mycenaean formal school of anatomical representation which was answered by his Minoan counterparts who made the Group of 'Vapheio Cup' Bulls. At the end of the century, the Spectacle-Eye Group of Knossos, ca. 1410–1375 B.C., presents simply-modeled animals whose dotted joints and ring-eyes reveal their artists' pride in technical expertise.

The individual artists in the groups that bridge the gap between the anatomical formalists and the technical mannerists may separately have deliberated the two extremes, but they nonetheless contributed to a fairly definite progression from the one to the other. The groups of their seals are arranged here by the type of eye, almond-shaped or dotted, and in the chronological order suggested both by their works from dated contexts and by the observable stylistic interrelationships. A chronological chart (Fig. 11) is appended to clarify the position of these groups within the fifteenth century.

(Cont. note 9) carry lions only. Lions are almost non-existent in the succeeding Spectacle-Eye and Islands Sanctuaries Group; as attackers they are supplanted by dogs.

## A. The Almond-Eye Group

### 1. The Tiryns Ring Group

(ca. 1500–1475 B.C.)

The same mouthless face and rolled hairstyle links I 87 with its M-V Lion traits of hatched belly and haunch fur and I 179 with its conservative use of the CP trait of drooping lower jaw on the genii and the M-V Lion trait of pronounced shoulders.

I 87 (1) from Mycenae T. 55, and 179 (2) from the Tiryns Treasure;<sup>10</sup> and AGDS II Berlin 26 from the Greek Islands.

### 2. The Group of 'Vapheio Cup' Bulls

(Knossos?, then perhaps on the Mainland, ca. 1500–1475 B.C.)

E. Davis, the Vapheio Cups and Aegean Gold and Silver Ware (NY and London, 1977) 1–5 and 256–7. Betts, *New Light on Minoan Bureaucracy*, *Kadmos* 6, 1967, 15–40.

Davis clearly and persuasively presents the compositional and technical differences among the gold cups from the Vapheio Cist (LH IIA context). The cup with the quiet scene, cup B (3 from PM III fig. 123B and 4 from PM II fig. 130, NMA 1759), presents three phases, presumably of a single narrative, nicely articulated by three different dividers (an olive tree, a man, and the handle); the bulls are well-finished and the surface is polished; except for the rim above and the wavy terrain below, there are no other horizontal borders; the spool handle is supported by a L-shaped lower attachment and secured at the rim by three gold rivets with rounded heads. Cup A (5 from PM III fig. 123A, NMA 1758) with the violent scene perhaps presents a single scene beginning from the two palm trees that flank and enfold the handle; the three bulls, viewed in profile and from a cavalier perspective, and the grapplers are all loosely formed and roughly finished; the unpolished surface betrays the chasing; a grooved tainia below the choppy terrain, and a similar border above, frame the scene and emphasize its frieze-like character; the spool handle is supported by a short lower attachment and secured to the rim with flat-head rivets.

<sup>10</sup> Vermeule and Karageorghis, *Mycenaean Pictorial Vase Painting* pp. 24 and 133, seem to date the Tiryns ring contemporary with the painted stele from Mycenae (no. XI.43), i.e., to LH III C, apparently on iconographical grounds.

These compositional and technical differences, including the rough surface finish, are certainly clear, and lead Davis to the conclusion that not only are they by two different artists but one of them, the artist of cup A, is a Mycenaean trained to imitate his Minoan master who created cup B.

There are, however, few true stylistic differences between the two cups. The bulls on both are the same: the massive form; small head; almond eye set in heavy lids; hatched ears; wrinkled neck; harsh shoulder ridge; short legs whose upper half consists of the two parts of the triceps brachii flanking the humerus on the forelegs, or the biceps femoris flanking the femur on the hindlegs, and both sets of muscles ending at a carpus indicated by a horizontal ridge; and a ribcage ending in three ribs followed by a triangular depression.

While the rough surface-finish might justify considering cup A as unfinished, the differences in the handle attachments find parallels not only on other cups from elsewhere but also on the two silver cups that were also deposited in the cist.

Davis identifies Master B as a Minoan and Master A as a Mycenaean both on compositional grounds (Minoan: unbounded narrative flow, high quality of workmanship, etc.; Mycenaean: violent spatial treatment, constrained field) and on technical grounds (Minoan: round-head rivets, L-shaped lower handle attachment; Mycenaean: flat-head rivets, and short, lower handle attachment).

The attribution of art objects to either Minoan or Helladic artists on the basis of compositional and syntactic differences may be relatively easy perhaps for the Early and Middle Bronze Ages, but by the fifteenth century Minoan and Mycenaean artists had begun a dialogue intricate enough to make such aesthetic distinctions between the two cultures difficult.<sup>11</sup> If the primary compositional influence on the violent cup A is not Cretan, then how does one explain either the similarity of the cup's top and bottom borders to those of the Taureador Fresco, or the presence of Minoan 'Easter Eggs' under the forelegs of the escaping bull and below the belly of the raging bull? On the other hand, the technical qualities which Davis sees as Mycenaean or Minoan could reflect local influences on the metal workers, many of whom, whether on the Mainland or in Crete, were undoubtedly from Crete until well into the fifteenth century. The differences could have been produced by different

<sup>11</sup> See Hurwit, "The Dendra Octopus Cup and the Problem of Style in the Fifteenth Century Aegean," *AJA* 83, 1979, 413–426, for an excellent analysis of this artistic fusion; also see *Masters I*, pp. 105–110.

exigencies (subject matter, time constraints, locale, age of the artist, demands made by the patron, etc.; see Davis's remarks on the differences between the silver siege rhyton and the silver battle krater, pp. 222–230).

Bulls similar to those on the Vapheio cups appear on many seal types, especially on those evidenced by Cretan sealings impressed by rings. The triangular depression below the clearly-marked ribs, the outlined legs, and the coursing power of these beasts, all derive from the bulls in the MM Couchant Agrimi Group. On the other hand, these 'Vapheio Cup' bulls exhibit three traits found on the bulls in the M-V Lion Group: hollow nose; thick cylindrical forelegs; and the pronounced shoulder that developed from the C-P linear shoulder (see the V-P Prism seals, *Masters II*, pp. 120–1).

Betts examined those sealings from different Cretan sites that seem to have been impressed by the same signet ring and, since most of the sealings seem to be made of local clays, made the suggestion that the goods being sealed did not travel from one site to another, but that the bureaucrat did, wearing either the original ring or its facsimile; Betts also suggested that these rings and/or facsimiles were made by one workshop located probably at Knossos. Weingarten,<sup>12</sup> studying the Zakro material, hypothesizes that almost identical seal types might reflect a close connection, perhaps familial or, more probably, functional between the bureaucrats who used them.

The dated contexts of the 'Vapheio Cup' Bulls all fall within LM IB/LH IIA, but the wide distribution of the group's works as well as their use of some M-V Lion traits suggest they were mainly made early in that period.

#### Simpler modeling (early?)

I 238 (6) from the Vapheio Tholos (LH IIA context); HM 1479 from Siteia; and CS 202 (7; GGFR pl. 58) said to be from Priene

*Close:* I 147 from Mycenae T. 518 (LH I–II context).

<sup>12</sup> J. Weingarten, *The Zakro Master and his Place in Prehistory* (SIMA Pocket-book 26, 1983), pp. 45–6. Because the book was published after *Masters III* had gone to press, it was impossible to be able to include there Weingarten's thoughts on the Mycenaean-Vapheio Lion Master; and a detailed analysis of her conclusions here would be out of place. Suffice it to say that she does not attribute two of the three KZ sealings associated with the M-V Lion Master, KZ 111 and 112, conclusively to her Zakro Master (p. 78); a cursory inspection of the book produces no stylistic discussion of the third sealing, KZ 113. Finally, Weingarten does entertain the thought that the M-V Lion Master did exist (p. 124).



*Associated sealings:* Kn HMs 216 (KSPI R86; Papapostolou pl. 46d), 295/329/Kappa-Theta (KSPI R46/K6), 379, and Lambda-Alpha, and Lambda-Gamma.

### Richer modeling (late?)

*Sealings impressed by rings, by their facsimiles, or their near twins:* AT 51, AT 54/Sk 2/Gournia HMs 101 (8; Betts 1967 fig. 1a), AT 58, AT 59, AT 108, AT 109, AT 110 (Betts 1967 fig. 11a), AT 145/Sk 3/Gournia HMs 102 (Betts 1967 figs. 6–7a), KZ 96/Sk 5 (Betts 1967 fig. 4), Sk 4, Sk 6 (Betts 1967 fig. 12a), and Chania 1547/1554 (Papapostolou no. 1) = Sk 5?

*Sealing impressed by a lentoid:* HMs 415 (14 = PM IV 562 fig. 530a) from Isopata, the Royal Tomb (LM IIB context; Betts 1967: 27 suggests the attribution to this Group).

*Metal seal:* I 274 (9) from Rutsi (LH IIA context).

*Sealstones:* I 152 (10) from Mycenae T. 518 (LH I–II context), and 185 (11) and 186 from the Midea Tholos (LH IIIAi context); HM 185 (12 = CS fig. 134; GGFR pl. 92) from Praios, 609 (13 = CS fig. 135) from Monkaro Pediados, and 2128 from Knossos (LM IB context; AR 1961–1962 fig. 38).

#### Close:

a) I 370 from Pylos (LH III Bii–Ci context)

b) A group?: I 209 from Prosymna T. 3 (LH III Ai context); and the lentoid that impressed a clay stirrup-jar stopper from Tiryns (LH III C context; AA 1979, 383–384 fig. 4).

c) Rings: I 91 from Mycenae T. 58; V 198; and a ring bezel from Kalyvia T. 9 (LM III Ai context; MonAntichi 14, 1904 520 fig. 11).

*Derived:* AM AE 2237 (= AE 1804; CS pl. 20), said to be from Archanes.<sup>13</sup>

<sup>13</sup> Bulletin of the City Art Museum of St. Louis 32 (1947) 99–103. The St. Louis Art Museum safeguards a gold-plated electrotype copy of the ring prepared by E. Gilliéron, père. The bull's hard and ropey musculature, the unique representation of this pose, and the way, on both the Ashmolean original and the St. Louis copy, the hoop was completely finished, including the granulation, before it was inserted into the back of the bezel strongly suggest that the ring is a forgery. On the other hand, Gilliéron's workshop at Skoufa 43, Athens, sold electrotypes only of authentic pieces. The second edition (1910) of his catalogue, *Galvanoplastische Nachbildungen Mykenische Altertümer* (Stuttgart) adds to the first edition (1905) the Harvester Vase, the Chieftain's Cup, the bull rhyton from the Little Palace at Knossos, the Isopata Ring, the Mochlos Ring (stolen from the HM before 1910 presumably to be destroyed, dissolved apparently for the purpose of elucidating some technical problems relevant to the detection of forgeries [Sourvinou-Inwood, Kadmos 12, 1973, 150ff.]; the ring or an electrotype by Gilliéron is now on display in the HM), and miscellaneous cups, swords, and diadems. Neither edition of the catalogue lists the Archanes Ring. It is probable, therefore, that the electrotype copy, which is now in the St. Louis City Art Museum, was made by Gilliéron fils (père died before 1930) for the exhibition of British Archaeological Discoveries in Greece and Crete (1886–1936) at Burlington House. His electrotype of the Ring of Minos, PM IV 947, now in the Ashmolean, was prepared solely for Evans and no further copies seem to have been made.

### 3. The Monumental Group

(Crete, ca. 1490–1465 B.C.)

These seals follow the M-V Lion School closely; the bulls have large heads, lumpy shoulders, thick upper forelegs outlined with profile lines (the inner one topped with a dotted ulna), and corkscrew tails. The artists in this Group also adopt the Lion Gate trait of shoe-like feet for hooves (Masters III, pp. 62–3), and they soften the fullsomely rendered bodies of the 'Vapheio Cup' Bulls. The curved legs of the Monumental bulls give them suppleness and foreshadow the more extensive use of this graceful trait by the Spectacle-Eye and Island Sanctuaries artists (discussed in forthcoming articles in this series). Note the foreshortened horns of the near bull on XII 287 – they provide an arresting variation from the distinctive and apparently special pose of two recumbent bulls, the far one with its head averted.

Two of the Monumental lentoids may have been cut from the same red flecked stone, though VIII 148 is published as agate and XIII 32 as jasper. The 'agate' lentoid VIII 148, however, certainly seems to be of the same stone as VIII 141 in Der Kretische Stier (Masters III, p. 58). Since the lion body there, with its two ribs, outlined form, and pronounced shoulder, is more conventional than the Monumental bull bodies, the artists of the two groups seem quite distinct, though the probability that they cut seals from the same block of what seems to be an otherwise unattested stone suggests they may have known each other.

VII 261 (15) possibly from Crete; VIII 148 (16) possibly from Crete; XII 237 (17) from Crete?, and 287 (18); XIII 32, and 33; CS 317 from 'above Kissamo, site of Polyrrenia' or Rethymnon; and HM 170 (19) from Kalyvia T. 1 (LM III Ai context; MonAntichi 14, 1904, 619 fig. 88).

*Close* (also see the Muzzle Group, close a):

a) Near the Cut-Style: IX 141 from Crete; and XII 215 from Crete?

b) Near Bulls with Striated Necks (Masters III, pp. 57–8): XII 250.

### 4. Knossian Bulls, Part I: The Tethered Bull Group

(Knossos? ca. 1475–1450 B.C.)

These bulls, like their Monumental cousins, are also adapted from the 'Vapheio Cup' bulls but are given a harder modeling and the hollow nose of the M-V Lion Group. Furthermore, they are distinguished by their shallowly engraved head, as if the bull's face were meant to be viewed on the stone as nearer to the viewer than the body. XII 251

uses L-J lions and XIII 26 seems to imitate the dot-eye Lions with Occipital Dots (section B 7, below).

In body form the Tethered Bulls also resemble the dot-eye Bulls from Ayios Ioannes T. 3 and the Wounded Bulls (section B 4, below): the plastic but lumpy modeling, the small nervous lines, outlined necks, and dots limited to muzzle and hooves. The similarity of their compositions suggests that their artists developed couchant bull poses, including the distinctive and apparently specialized pose of two recumbent bulls, the far one with its head averted, perhaps together in the same workshop at Knossos; this location is suggested by the several seals from Knossos in the dot-eye Ayios Ioannes T. 3 and Wounded Bull subgroups, though it is curious that the seals in the almond-eye subgroup Tethered Bull seem to come almost exclusively from the Mainland.

The 'Vapheio Cup' bull type and the limited use of M-V and L-J traits suggest a date after 1475, while the absence of Mumps, a trait that is developed by the late Dot-Eye and the subsequent Spectacle-Eye artists toward the end of the century, would preclude a date late in the second half of the century.

?I Supp. 34 from Kakovatos Tholos 2 (LH IIA context); XII 249 (20), 251 (21), and 289; and XIII 26 (22).

*Close:* I 239 from Vapheio; V 434 from Nichoria (LH III Aii-B context); VIII 89 possibly from Crete; IX 133; and CS 243.

*Near:*

a) an artist in here?: I 240 from Vapheio, and 275 from Rutsi (LH II-III A context); and a lentoid from Dendra/Midea T. 2 (LH III Aii [E. W. and H. W. Catling, BSA 69, 1974, 254] or Bi context; Persson, Royal Tombs pls. 28a and 34c middle).

b) I 283 from Rutsi (LH II-III A context).

*Near, a group:* I 230 and 237, both from Vapheio (LH IIA context).

*Close:* I 192 from Midea T. 10 (LH II-III A context).

*Related:* I 509 from Crete.

*Associated sealing:* I 19 from Mycenae (LH III B context).

## 5. The Group of the Crystal Rings (I 20 and XIII 27)

(Mainland? ca. 1450-1425 B.C.)

A large number of seals, most carrying bovines, shares a distinctive head with a large dot for both nose and eye, the latter set in a rhomboidal socket, a smooth but fulsomely modeled body often outlined, thick forelegs whose upper half is usually outlined, and large shoes, or, for the Muzzle Group's bulls, dots for hooves.

The group can be subdivided into several subgroups and related seals. The seals in Squirrel Eyes are most easily recognized by their very large eyes, short V-shaped lower jaw when the mouth is open, and bodies that are usually outlined completely. A distinctive pair of lines across the muzzle of some bovines distinguishes the Muzzle Group with perhaps four subgroups described here by their body types. Several seals with bovines and horses schematize the hollow nose of the M-V Lion Group; the result approximates to the hallmark of the Muzzle Group.

Many of this group's seals may have been produced in Crete; a few come from there. Most, however, come from the Mainland and there they obviously found the greater favor. The pronounced almond-eye of the agrimia in this group depends greatly on the earlier seals in the Ayia Pelagia Agrimi Group;<sup>14</sup> there are also obvious echoes of some M-V Lion traits: thickened forelegs, cork-screw tail (I 53), and striated necks (XIII 83). The smooth modeling and precise positioning of the animals here, however, suggests a later and manneristic phase; the short lower jaw and single large dot for the jowl are traits associated with Mumps. These two observations suggest a date in the third quarter of the fifteenth century.

### i. Squirrel Eyes

I 20 (23) from Mycenae, the Ramp House, and 298 from Pylos (LH III Bii-Ci context); V 308 (24) from the Pylos Palace area, and 663 (25) from Thebes, Megalo Kastelli ChT 1; IX 125 (26), and 156 said to have been near Antioch; X 254; and CS 301 from the Knossos area.

*Close:*

a) A subgroup: IX 129 (27); and CS 307 (28 = CS fig. 130) from the Taygetos region.

*Close:*

1) Same as Contorted Bull, close c? [section A7, below]: V 601 from Mycenae House A (LH III B context); and XIII 83.

2) A subgroup?: IX 108; and XIII 29.

<sup>14</sup> Younger, BSA 74, 1979, 272. This Group's goats have long, curved, and cross-banded horns: CMS VII 89, and CS 285 from Ayia Pelagia. Other seals may belong to the same Group: CMS I 95 from Mycenae T. 58, and 155 from Mycenae T. 520 (LH III Aii context), and X 137 and 252; CS 308 from Avdou; AGDS II Berlin 53 from Boiotia, and IV Hannover 7 from the Argolid; and HM 2301 from Archanes Tholos B (LM III Ai context). CMS I 93 also from Mycenae T. 58 seems close. CMS VII 128, VIII 110c, and XIII 33 and 43; CS 19P also from Ayia Pelagia (CS p. 148: "tholos tomb LM IIIB"), AGDS I Munich 58, and the lentoid no. 3 published in BSA 74, 1979, 272, all seem related. Though the contexts seem late, the Ayia Pelagia Group has close affinities with the Group of the Couchant Agrimi and should be dated MM(II-III)-LM I.

b) By one circle (also close to Caprids from Isopata T. 3, Part I, close 1 [below]): I 123 from Mycenae T. 88; CS 308 from Avdou (in the Ayia Pelagia Group?); and Kn HMs NA (KSPI Q1).

c) I 66 from Mycenae T. 26 (LH III A context?). Close goats: I 74 from Mycenae T. 42.

d) Miscellaneous: I 53 from Mycenae T. 10, 57 from Mycenae T. 24 (LH III B context), and 76 from Mycenae T. 42; I Supp. 76 from Crete; IV 275 from the Messara; V 317 from Krissa T. 3 Burial F (LH III C context); and IX 126 said to have been found in Crete.

## ii. The Muzzle Group

Bulls: XIII 10 (29), and 27 (30) both from Mycenae.

Bullocks

Smooth-bodied: CS 242, and 296 (31 from GGFR pl. 88) from central Crete.

Fuzzy: I 58 (32) from Mycenae T. 25, and 189 from the Midea Tholos (LH III Ai context).

Calves, a subgroup (cf. VII 103 in Spectacle-Eye subgroup C [forthcoming]): I 215 from Prosymna T. 41 (LH III Bi context); V 673 (33) from Thebes, the Kadmeion (LH III Bi context).

Close:

a) Also close to the Monumental Bulls: VII 105 from Mycenae.

Associated sealings: Chania 1542/1544 (Papapostolou no. 2), 1002 (Papapostolou no. 3), and 1529/1530 (Papapostolou no. 25).

b) an artist in here?: VII 87 from Knossos (34; the reverse of this seal is illustrated in CMS as if it were the reverse of VII 96); XIII 8, and 31.

Close: IX 109 from central Crete; and XIII 78 (also close to the Bulls from Ayios Ioannes T. 3 [section B 4i Close e, below]).

Goats: V 185; XIII 7 (35); and HM 166 (36) from Kalyvia T. 4 (MonAntichi 14, 1904, 622 fig. 95).

Close: I 105 from Mycenae T. 68.

Associated sealings: I 303 from Pylos (LH III Bii-Ci context); and Kn HMs 210 (KSPI R29).

Boar: AGDS II Berlin 23 (37) from the Peloponnese. Related, early?: I 227 from Vapheio (LH IIA context).

## 6. Caprids from Isopata T. 3, Part I

(Knossos; ca. 1450–1425 B.C.)

Kadmos 13, 1974, 1–5.

Two lentoids from Isopata T. 3 carry caprids: HM 908 an almost circular almond-eye nanny and her twins, one whom she regards above her back and the other (only sketched) suckling below her; and HM 909 a dot-eye agrimi regarding an agrimi head above its back. Each has

an iconographic duplicate: VII 233 for HM 908 and CS 313 for HM 909. All four seals share a distinctive right-angled shoulder, linear boney forelegs, and an oval eye. For the seals in this group that depict animals with a dot-eye, section B 9, see below. If these seals are all by a close group of artists, their latest works may be subgroup f in Part II, where the large dots for the jaw resemble some of the similarly pronounced jas in the Spectacle-Eye Group.

Another supposed set of twins is certainly only one lentoid: HM 835 (?) once in the Herakleion Museum and CS 7P said to come from Gortyn. HM 835 is published as coming from Zafer Papoura T. 36 (Archaeologia 59 pt. 2, 1905, 59) and carries a goat standing right, leashed to a column, with, according to Evans's description, a branch in front that does not appear, however, in his drawing (fig. 61); at PM III 317 fig. 209 this seal is made to be a sealing from the Archives Deposit (KSPI C55); and, to confuse the matter further, Kenna (CS p. 58 n. 11) suggests that the branch may be modern.

a) VII 233 (38); and HM 908 (39) from Isopata T. 3 (LM III Ai context).

b) I 93 from Mycenae T. 58 (40), 188 from the Midea Tholos (LH III Ai context); V 641 (41) from Gouvalari Tholos 1; and HM 179 (42) from Kalyvia T. 9 (MonAntichi 14, 1904, 521, fig. 10a).

Near: AGDS I Munich 58.

c) CS 7P (= ? HM 835; 43 = PM III fig. 209 retouched) from Gortyn (or Zafer Papoura T. 36).

d) Associated sealing: Kn HMs 208 (KSPI R7; 44 = PM IV fig. 208).

Part I, close:

1) A subgroup also close to the Contorted Bulls (section A 7, below): I 95 (45) from Mycenae T. 58; HM 2301 (46) from Archanes Tholos B (LM III A1 context; Archaeology 20, 1967, 276–281 fig. 7b), and Kn HMs 424 (KSPI U7; 47 = PM IV fig. 597 Ba).

Close: Squirrel Eyes, close b (above, section A 5i).

2) Miscellaneous: VII 113 from Ialysos; X 137; and CS 306 said to have been found in Crete.

## 7. The Contorted Bull Group

(Argolid, ca. 1445–1420 B.C.)

This Group is the only almond-eye one to use animals with single and double Mumps, a trait that otherwise belongs to the Dot-Eye Group (see below). The animals here, all bovines but one, are also distinctive in their own right; standing with their head down below their belly, they have an outlined ear, prominent neck (compare I 20 and 298 in Squirrel Eyes), and fairly simplistic legs and feet. The smooth modeling,

outlined ear, and the use of Mumps suggest a date for this Group in the second half of the fifteenth century, while the woman's dress pattern on V 595, though not paralleled amongst the CP Group, is close enough to a CP type to make it improbable for this Group to have emerged very late in the fifteenth century. Its overlap with the Crystal Rings Group, Caprids from Isopata T. 3, and the Spectacle-Eye Group, therefore, suggests a date somewhat like that suggested above.

I 104 from Mycenae T. 68; V 32 (48) from Argos, Deiras T. XI (LH III Aii context), 319 (49) from Krissa T. 1, Burial A (LH III B context), 587 and 588, both from Nafplion, and 595 (50) from Mycenae, South House (LH III B context); and IX 122, and 132. Serpentine imitation: CS 348.

*Close:*

a) Caprids from Isopata T. 3, Part I, A 6 above, close 1.

b) Miscellaneous: I 49 (a new photograph in Pini, JRGZM 28, 1981, 48–81 no. 3) from Mycenae T. 9; and IX 11D from Crete, and 23D.

c) The same subgroup as Squirrel Eyes i, close a, close 1? (section A 5i, above): XIII 43.

*Near:* I 268 from Tragana T. 2 (LH III A context).

## 8. Miscellaneous Seals

a) *CP and L-J Lion Types:* I 98 from Mycenae T. 58, 231 from Vapheio (LH IIA context), and 259 from Vapheio; and VII 95 from Hydra, and 126 from Cyprus.

b) *Serpentine imitations:* X 121, and 168; and HM 1272.

c) *Formal:* I 54 from Mycenae T. 11; V 216 from Brauron; VII 66; XII 245 from Crete?; and HM 167 from Kalyvia T. 1 (LM III Ai context; MonAntichi 14, 1904, 617 fig. 85), 900 from Isopata T. 1 (LM II context; Archaeologia 65, 1913, fig. 14), 1233 from Gournes T. 1 (LM III B1 context; Deltion 1918, pl. 5.2); a lentoid from Isopata T. 2 (LM III Ai context; Archaeologia 65, 1918, p. 58 fig. 55); and a cylinder Sl 681 in the Munich Antike Sammlung from a Kokovatos tholos (LH IIA context; AA 77, 1964, 1–21 no. 50).

d) *Miscellaneous*

Bulls: I 111 from Mycenae T. 78; and HM 2393 from Sellopoulo T. 4 (LM III Ai context; BSA 69, 1974, 194–257 fig. 14a).

Boars: I 184 from the Midea Tholos (LH III Ai context); XII 240 from Crete.

Monsters: AGDS II Berlin 27 from Phigaleia, and 28; and a lentoid bought from a dealer in Orvieto, now in the Villa Giulia, and once in the Castellani Collection (Battaglia, Gioielli antichi [1980] no. 1; PM IV 465 fig. 389a; Gill, AM 79, 1964, no. 47).

e) *Associated sealings:* I 160 from Mycenae, House of the Oil Merchant (LH III Bi context), and 310, 346, and 367, all from Pylos (LH III Bii-Ci context).

## B. The Dot-Eye Group

### 1. The Athens Minotaur Group

(ca. 1500 B.C.)

The name of this Group derives from the figure on the ring V 173 identified by Shear (Hesperia 4, 1935, 318–320) as the Minotaur leading away captive Athenian maidens. The simple style of gouged lines for the body and large oval blob for the head nods in the direction of the Isopata Ring (Masters II, pp. 134–5) as well as the Mitannian cylinders (Wace and Porada, BSA 52, 1957, 197–204; Pini, PZ 58, 1983, 114–126).

V 173 (51) from Athens Agora T. VIII (LH III A1 context), and 197 (52).

### 2. The Tragana Duelist Group

(= Berry-Head Waterbirds?)

A. Tamvaki, "A Small Contribution to the Study of Mycenaean Glyptic," Festschrift Sp. Marinatos (forthcoming).

Some of the seals belonging to this Group have long been recognized by Kenna (e.g., VII p. 170), the present author, and others. Tamvaki regards I 263 and VII 130 as by one artist, and I 131 and 285, V 643, VII 129, IX 154 and 158, XII 292, and HM 1654 as by his workshop, to which she relates I 132 and 284, CS 204, and AT 115.

Attributing the human figure to an artist or even a close group is far more difficult than attributing bulls or lions. Sealstone artists apparently felt free to depict animals with many nuances of expression and technique; human figures are more conventional, falling into only a few major types. The Tragana Duelists, however, form a distinct class unto themselves with two seals (IX 158 and CS 204) slightly more naturalistic than the others.

In this Group simple lines characterize stiff animals and people. Human heads in profile have a large dot-eye set in a shallow depression (cf. the Tethered Bulls, above, and the Couchant Boars Group and the Bulls from Ayios Ioannes T. 3, both below); heads frontal have the eyes set under a triangular cap and flanking the septum; boar's tusk helmets hide the head behind a column of horizontal lines sometimes also below a triangular cap.

IX 154 establishes a direct link between this Group and the Berry-Head Waterbirds (Masters II, p. 127); they probably could be merged together.

I 131 (53) from Mycenae T. 91 (LH II context?), 263 (54) from Tragana T. 1 (LH III A1 context), and 285 from Rutsi (LH II–III context); V 643 from Gouvalari Tholos 1; VII 129, and 130 (55), both from Crete; IX 154 (56); XII 292 from Crete?; HM 1654 (57) from Ayios Ioannes T. 3 (LM IIB context; BSA 47, 1952, 272, fig. 16 no. III.20); and AT 115.

*Close:*

a) I 284 from Rutsi (LH II–III A context)

b) V 638 from Akona Tholos 1

*Close:* XII 284

*Near:* IX 158

### 3. The Keos-Berry Lion Group

(ca. 1500–1475 B.C.)

This Group's sketchy technique produces bristly lions more in keeping, even to the canted body, with Cut-Style lions than with those in the M-V Lion tradition. For instance, the upper forelegs are not thickened, the shoulder is only vaguely articulated, and, when seated, the body is slightly canted.

Some aspects of the Goober-Head Lions (Masters III, p. 61) and of the L-J Lions find echoes in the Keos Group; compare XII 229, close to the V-R Prism lions (Masters II, p. 120). The lumpy jowl of HM 839 is more probably due to over-modeling than to any influence from Mumps.

The Berry Lions are rendered in a neater, slightly more stylized technique; their heads are distinctively long and thin. Two close seals present lions with the V-R Prism trait of a deep, curved line for the shoulder; this trait and the context of HM 2345 may indicate that this subgroup is a slightly younger contemporary of the Keos Lions.

#### i. The Keos Lions

I Supp. 32 from Epidauros, the Apollo Maleatas Sanctuary; V 192 (58), 498 (59) from Aya Irini, Keos (LH III B–C context), and 680 (60) from Thebes; VII 168 (61) from Enkomi T. 1; AGDS I Munich 64; HM 839 (62; Prehistory and Protohistory, p. 214 bottom left) from houses south of the Palace at Knossos; and Florence 82528 (Laviosa, SM 40, 1969, 7–18 no. 6).

*Close:*

a) Miscellaneous lions: V 589 from Nafplion; X 264; and HM 332 (ArchEph 1907 pl. 8.133), and 2085 from Skalani.

b) The Brummer Sow Group: V 314 from Delos (63); and a lentoid in the Brummer Collection (NY).

*Near:* IX 6D from Crete.

#### ii. The Berry Lions

I 133 from Mycenae T. 103, and 183 (64) from the Midea Tholos (LH IIIA context); and XIII 13 (65) in the Berry Collection.

*Close:*

a) Close to the V-R Prism Group: HM 2345 from the Poros Chamber Tomb (MM end – LM I context; Praktika 1967, 195–207, pl. 190a and b); and a lentoid in the Brummer Collection (NY).

b) An artist in here? (cf. HM 1863 in Dot-Eye Mumps, Stags b, below): I 494 from Crete; and CMCG 305.

c) Miscellaneous: I 281 from Rusti (LH II–III A context), and 512 from Crete.

#### 4. Knossian Bulls, Part II:

The Group of Bulls from Ayios Ioannes T. 3

and

The Wounded Bull Group

(Knossos?, ca. 1475–1450 B.C.)

See Part I, section A4, above.

These bulls, like the Tethered Bulls, are adaptations of the 'Vapheio Cup' Bulls, but more simply rendered.

The Ayios Ioannes T. 3 bulls display a more linear treatment of the shoulder and feebler legs, and, on occasion, the curious use of three dots for the front of the mouth. There are the expected M-V and L-J Lion traits (e.g., V 688 resembling a Goober-Head Lion [see Masters III, p. 61], and HM 1658b, a L-J Lion type). No bull exhibits Mumps. The most common pose is the distinctive one in which two bulls recline, the far bull turning its head away.

The lentoids from the Warrior Grave, Ayios Ioannes T. 3, may imply that these seals were produced at Knossos, as Boardman suggests (XII 248 = GGFR pl. 87, a product of "Mycenaean Knossos").

A curious feature, already noted, is the three dots placed at the front of the mouth on V 433 and XII 248; these also appear on apparently only one pictorial vase, a bell krater from Kition?, Cyprus. Vermeule and Karageorghis, *Mycenaean Pictorial Vase Painting*, date this krater, their pot V. 48, to their Cypriot Ripe I phase (LH III Bi, 1300–1270/60 B.C.); perhaps then the painter, their Painter 13, archaized by using a sealstone for his model, a practice Benson thinks likely (AJA 65, 1961, 341).

The Wounded Bulls bellow in pain; they are slightly sleeker with a profiled face, slightly upturned nose, moderately thickened upper fore-



legs, and vaguely dotted hooves. The shape of the head anticipates the heads of the bulls attacked by the Lions with Occipital Dots (section 7, below).

#### i. The Bulls from Ayios Ioannes T. 3

V 433 (66) from Nichoria (LH III Aii–B context), and 688 (67) from Orchomenos; VII 127; XII 235 from Crete?, and 248 (68); HM 1438 from Limnes Mirabellou, and 1656 (69), and 1658 (70 and 71), both from Ayios Ioannes T. 3 (LM IIB context; BSA 47, 1952, 273, fig. 16 nos. III.21 and 22, respectively).

*Close:*

Dot noses

a) An artist in here?: I 286 from Rutsi Tholos 2 (LH II A–III Ai context), and VII 192 (Pini publishes new photographs of both these seals, JRGMZ 28, 1981, 48–81 nos. 15 and 59, respectively).

b) Miscellaneous: V 195, and 196; CS 299 from Argypolis, Crete; and a lentoid once in the Arndt Collection (GGFR pl. 186).

Hollow noses (compare X 131, Lions with Occipital Dots, close d [section 7, below])

c) An artist in here?: V 432 from Nichoria (LH III Aii–B context); and CS 311.

*Close:* X 316 from Crete.

d) Miscellaneous: I 109 from Mycenae T. 78, 142 from Mycenae T. 515 (LH IIB context), and 241 from Vapheio.

e) Also close to the Muzzle Group, close (section A 5ii, above): XIII 78 acquired at Mycenae.

*Fragment:* VIII 91 from Crete?

*Near, miscellaneous:* CMCG 224; and HM 160 from the Diktaian cave (ArchEph 1907 pl. 8.121).

*Associated sealing:* I 318 from Pylos (LH III Bii–Ci context).

#### ii. The Wounded Bulls

I Supp. 77 from Crete; V 645 (72), and 646 (73), both from Gouvalari Tholos 2; and AGDS II Berlin 46 bought in the Peloponnese.

*Close,* a subgroup: IX 119; and HM 2093 from Knossos, Royal Road (cf. KretKhron 17, 1963, 355).

*Miscellaneous:* I 517 from Knossos.

#### 5. The Group of the Couchant Boars

(Knossos?, ca. 1475–1450 B.C.)

The smooth modeling of the bodies and the profile line above the back recall Squirrel Eyes, but the dot-eye in a shallow socket relates these boars closer to the Knossian Bulls.

a) V 666 (unfinished?; 74) from Thebes, Megalo Kastelli T. 3; and HMs 1098 from Mirtos Pyrgos (LM IB context; Hägg and Marinatos, Sanctuaries and Cults 171 fig. 3). b) IV 240 from Knossos; and IX 136 (75) from an Aegean island.

*Close:* CMCG 278, and 302; and HM 1286 from Knossos, the House of the Frescoes, and 2055 from Inatos.

#### 6. The Lapidary's Workshop at Knossos

(Knossos, ca. 1475–1450 B.C.)

BSA 74, 1979, 258–268.

The stone matrix was found with Kn HMs 283 (KSPI Q22), the 'clay signet' (Masters II, p. 134–5: Isopata Ring, Associated sealings), which must date before 1450 since KZ 3 duplicates the scene. The cow on the matrix and ring also resembles the Tethered Bulls and Ayios Ioannes T. 3 Bulls. The unusual position of the cow's horns and the lumpy modeling connect the Ashmolean matrix and I 125.

I 125 (76) from Mycenae T. 90; and AM 1938.1087 (77), the stone matrix from Knossos.

*Related:* V 200.

#### 7. The Group of the Lions with Occipital Dots

(Knossos?, ca. 1460–1435 B.C.)

Half these seals, mostly of dull-colored agate, depict a lion curved over and attacking a bull pendent and perpendicular to the lion (the stringhole runs vertical, perpendicular to the lion's body). The lion, best seen on CS 14P where it resembles the lion on I 185 ('Vapheio Cup' Bulls, section A 2 above) has a characteristic dot in the center of the back of his head to depict the external occipital crest, frontal eyes that are usually large – being formed from a large drill sinking – and a spikey mane slightly resembling that of the Keos Lions; the bull opens his mouth to form a M pierced by a thin linear tongue (cf. HM 396 from a MM II–III House Tomb at Gournia fig. 27, and the lion's front legs on HM 839, one of the Keos Lions).

In addition to the spikey mane, another early trait is the harsh shoulder line reminiscent of the L-J Lion types. Despite these early indications, however, the bulls strongly resemble the Knossian Bulls, while the curved neck of the cow on X 216 seems copied from the Crystal Rings Group or more especially from the Contorted Bull Group; the

date of these Lions with Occipital Dots should then lie between these groups.

V 689 (78) from Orchomenos; X 216 (79); CS 14P from the Ayia Pelagia Tholos; HM 561 (80) from a tomb on Cape Plake, south of Palaikastro (BSA 40, 1939–1940, 46, no. 23, fig. 14; the seal was found with two blossom bowls, suggesting a LM I context), 836 from Zafer Papoura T. 36, "The Chieftain's Grave" (Archaeologia 59 pt. 2, 1905, pp. 441–449 no. 36m), 1712 (81) from Ayios Ioannes T. 4 (LM IB–II context; BSA 51, 1956, 93, fig. 5.4); and Kn HMs 400/1024 (KSPI Vd/Betts 33).

*Close:*

- a) A group: I 36 from Mycenae; and AGDS I Munich 40.
- b) A group? close to the Tethered Bulls: I 251 from Vapheio (LH IIA context), and V 436 from Nichoria (LH III Aii–B context).
- c) VII 159.
- d) Miscellaneous: I 116 from Mycenae T. 83, and 384 from Menidi (LH IIIB context); V 194; X 131 (cf. Ayios Ioannes T. 3 Bulls, close b–e); and HM 124 from Knossos (ArchEph 1907 pl. 7.98).

*Near:* X 127 in Spectacle-Eyes, subgroup A (forthcoming).

Associated sealings: Kn HMs 1036 (Betts 35); and AT 48.

Spectacle-Eye Imitator: I Supp. 112.

*Dependent:* The Sangiorgi Group, one artist or perhaps as many as three working ca. A.D. 1905 (Betts, CMS Beiheft I pp. 17–35; the illustrations cited below come from this article). JGY divides them for convenience into three interrelated subgroups:

- a) AGDS I Munich 39 (fig. 3) modeled on VII 261, 41 (fig. 10), 42 (fig. 11), 46 (fig. 21) adapting the composition of XIII 26, 75 (fig. 29), 280?, and 285 (fig. 9); ?AM 1965.361; a seal in the E. Borowski Coll. (fig. 8); Cabinet des Médailles nos. M6514, M6521, M6596, M6597, M6607, M6608, and M6868; an oval seal in the Chandon de Briailles Coll.; BM 125334/1933.2.9.2 (fig. 25) and 1922.6.13.1 (fig. 28); Fitzwilliam Mus. inv. no. B27 (fig. 22); Florence Mus. 84587 (Laviosa, SMEA 10, 1969, 10 no. 5); Gallerie Vollmoeder, Zurich no. 4609 (fig. 16); HM 1264 (fig. 24) and a seal in the Giamalakis Coll. (fig. 31); Hermitage Mus. inv. nos. 502 (fig. 2) and 512 (fig. 14); an amygdaloid in the Kannelopoulos Mus. (fig. 12); National Museum, Copenhagen inv. nos. 7137 (fig. 13), 7138 (fig. 17), and 7308 (fig. 23); NYMM 26.31.228 (fig. 30) and 26.31.281 (fig. 33), both with Squirrel Eyes; Peabody Mus. 38.92.4674 (fig. 27); an amygdaloid in the Sangiorgi Coll. (fig. 1); a seal in the Walters Art Gallery (fig. 32); two amygdaloids once offered to E. Erlenmeyer (figs. 5 and 6); a seal in a private collection in Bern (fig. 7); a lentoid once in the MH Swindler Coll. (fig. 26).

add: X 301?; Academy Romania 475 (Gramatopol, CollLatomus 138, 1974, 40 no. 5); CMCG 296; HM Giamalakis 3615; and a lentoid in the Oxford, Mississippi University Museums.

- b) The Thisbe 'Hoard' (fig. 34 and CS pl. 21); and a ring said to come from near Smyrna (PM III 225 fig. 158).

c) Bristlier appearance: CMCG 280; a lentoid once in Geneva (fig. 15); an amygdaloid once offered to H. Erlenmeyer (fig. 18) and the glass seal moulded from it now in a private collection in London (fig. 19); and a lentoid in the Younger Coll.

## 8. The Group of the Running Calves

(Mainland, ca. 1450–1425 B.C.)

The typical seal in this group depicts a pair of calves, sometimes bulls, overlapping, and running in one direction; they resemble the Muzzle Group's Calves (section A 5 ii above) but without the pair of lines at the muzzle. These calves have triangular heads (thick and thin), dotted noses, and thickened forelegs reminiscent of those in the M-V Lion Circle. The slightly swollen jowl may anticipate Mumps.

- a) *Thick heads:* I 72 (Pini publishes a new photograph, JRGZM 28, 1981, 48–84 no. 4) from Mycenae T. 33, 83 from Mycenae T. 48, 122 (82) from T. 86, and 287 (83 and 84) from Pylos T. Gamma/Tholos III (LH II, Palace Style context; PN III 84 fig. 169.20); V 660 (85) from Salamis; VIII 66 possibly from Crete; IX 111, and 135; X 298; CS 333 from Rethymnon; and AGDS II Berlin 49.

*Close, miscellaneous:* I 50 from Mycenae T. 10, and 69 (86) from Mycenae T. 27; AGDS I Munich 82; and HM 78 (ArchEph 1907, pl. 7.83), and 2499 from Archanes.

Associated sealings: I 345, and 375, and I Supp. 191, all three from Pylos (LH III Bii–Ci context); and VIII 130 probably from Crete (Knossos?).

- b) *Thin faces:* I 386 (87) from Menidi (LH III B context). Associated sealing: Kn HMs 287 (KSPI R69).

## 9. Caprids from Isopata T. 3 (Part II)

(Knossos, ca. 1450–1425 B.C.)

See Part I, section A6 above.

- e) CS 313 and HM 909 (88 = CS fig. 127) from Isopata T. 3 (LM III Ai context; Archaeologia 59 pt. 2, 1905, 16 fig. 22).

- f) I 99 (89) from Mycenae T. 61, and 266 from Tragana Tholos 2 (LH III A context); VII 119 (90); HM 165 from Kalyvia T. 1 (91; MonAntichi 14, 1904, 621 fig. 94), and 2384 (92) from Sellopoulo T. 4 (LM III Ai context; BSA 69, 1974, 195–257 fig. 14c); and AGDS II Berlin 44 (93 = PM IV fig. 542b) from Mycenae.

*Close:* V 336 from Medeon T. 29.

*Near:*

- a) V 157 from Kokkolata (LH III B [–C] context).
- b) XIII 28 from Crete (Chersonissos?); and HM 2250 from Archanes Tholos B (LM III Ai context; Archaeologia 20, 1967, 276–281). Associated sealing: Kn HMs 221 (KSPI R10).

*Softstone imitations:*

- a) XII 268 from Crete?
- b) IV 269 from the Messara, V 751 from Pefkakia, XII 305 from Crete?, and CMCG 248.

Associated sealings: Kn HMs 124 (KSPI N13), and 311 (KSPI R84).

- g) I 61 (94) from Mycenae T. 25, and 92 (95) from Mycenae T. 58.

*Close:* VIII 108.



## 10. The Group of the Messy Ring

(ca. 1450–1425 B.C.)

One ring, I 90, carries two dot-eye agrimia set against a background of chaotically placed fronds. Such a wild display of gouges and lines finds a parallel on only one sealstone not in the Cut-Style. The goat on V 732 resembles the Caprids from Isopata T. 3.

I 90 (96) from Mycenae T. 58; and V 732 (97) from Mega Monastiri T. Gamma (LH III A–B context).

## 13. Dot-Eye Mumps

(Knossos?, ca. 1430–1405 B.C.)

The term 'Mumps' refers to the use of the snub-nosed drill to make an animal's cheeks rounder. From one to three dots are placed on the inside of the jowl line or else the whole jowl is enlarged with a single area of broad modeling. Bulls were especially favored for this treatment. For convenience, therefore, the presentation of the group first distinguishes five groups and then catalogues the remaining seals first by animal and then by the shape and formation of the jowl and head.

Mumps are used for both Dot-Eye animals and for the Spectacle-Eye animals whose eyes are created by the tubular drill. Since about two-thirds of the Spectacle-Eyes also exhibit both kinds of Mumps, the dotted and the modeled variety, it is therefore unlikely that this formal distinction has any chronological value. While the internal chronology of either group cannot at present be determined, it is clear from the numerous dated contexts and known find-spots that the Spectacle-Eye Group was created at Knossos in LM III Ai. The earliest context for a Dot-Eye Mump seems LH II/Palace Style for I 8, and likewise suggests that this group preceded Spectacle-Eyes, very likely at Knossos as well.

## Bent horn (each subdivision a subgroup)

a) I 59 (98) from Mycenae T. 25; and VII 157.

Close: CMCG 235.

b) VII 161 (99) from Sparta, and 162; X 142; and HM 954 from Gournes.

c) V 316 from Delos, and 318 from Krissa ChT 2 (LH III B–C context).

## Minor subgroups

d) I 45 (100) from Mycenae T. 8; and X 164.

e) I 124 from Mycenae T. 88, and 264 (101) from Tragana T. 2 (LH III A context); and Kn HMs 380, and HMs MF.

## Miscellaneous

## Lions

f) *An artist in here?*: I Supp. 115; X 302; and XIII 57.

g) *Miscellaneous*: CMCG 268, and 338; CS 316; and a lentoid once in the Kn Strati-graphical Museum (BSA 74, 1979, 270–3 no. 1).

## Bulls

## No chin

h) A loose group: I 65 from Mycenae T. 26 (LH III A context?); and IV 256 (102) from Eleounda.

Soft stone imitations: VII 193 from Crete; IX 147; and agrimia I Supp. 144, IX 176, and HM 29 (ArchEph 1907 pl. 7.59).

Close: IX 118; and Kn HMs N (KSPI Q4).

i) *Miscellaneous*: I 70 from Mycenae T. 28, 77 from Mycenae T. 42, and 267 (cut from the same block of stone as I 265? [see Spectacle-Eye Group, subgroup F, forthcoming]) from Tragana T. 2 (LH III A context); V 220 from Brauron T. 19 (LH III B context), and 275 from Armenoi T. 56; VIII 107 (103); XII 14D; XIII 35 serving as the model for AM 1938.1114, a cushion seal in the forged (ca. 1905?) Thisbe hoard by the Sangiorgi Group of artists (see above, section B7); CMCG 227 from Chersonissos; CS 358 from Crete (Pini publishes a new photograph in JDI 95, 1980, 77–108 no. B1), and 12P; AGDS I Munich 62 from the Piraeus, and 74; and HM 206 from Knossos, and 1598 from Katsambas T. B (LM III Ai context; Alexiou, *Hysterominoikoi Taphoi Limenos Knosou* [Katsamba] fig. 34).

## Dotted chin

j) *Miscellaneous*: X 217 (104); AGDS I Munich 53 from Crete; and a cylinder in the Erlennmeyer Collection (Pini, JDI 95, 1980, 77–108 no. A9).

Softstone imitation: X 138.

k) *Associated sealings from Knossos*: AM 1938.1052 (= Kn Ws 8153; BSA 57 [1962] 53–54); and HMs 111 (KSPI N6; Papapostolou, pl. 46F).

## Closed Mouth

l) *One dot near the nose*: I 8 from Mycenae Shaft Grave Rho? (LH II/Palace Style context); IV 272 from Knossos; V 729 from Mega Monastiri T. Gamma (LH III A–B context); and IX 146.

m) *Two large dots*: IX 159 (105); and HM 1864 from Sellopoulo T. 1 (LM III Aii–B context; AR 1957, 24–25), and 2043 which looks very similar to Kn HMs 1014 (Betts 46).

Unfinished lentoid: VII 156.

Associated sealings: AM 1938.1153h impression A (Pini, *Kadmos* 21, 1982, 1–4 pls. I and IIA) from Knossos; Kn HMs 142 (PZ 1970, 217 no. B3), and 212/213/1000/1005 (KSPI R6/Betts 51/Betts 52); and? HMs 1097 from the Shrine at Mirtos Pyrgos (LM IB context; Hägg and Marinatos, *Sanctuaries and Cults* 171 fig. 2).

n) *Miscellaneous*: IV 268 from Siteia; VII 181; AGDS II Berlin 47 from Crete; and HM 604 (ArchEph 1907 pl. 8.141) from Kastelli Pediados.

o) *Associated sealings*: I Supp. 178 from Pylos (LH III Bii–Ci context); and Kn HMs 147/313 (Kadmos 5, 1966, 1–16 no. 7), and L (Betts 28).

### Agrimia

I Supp. 3 from Mycenae T. 47; and VII 180 and 196.

### Kid

Kn HMs 205 (KSPI 01).

### Goats

*An artist in here?*: VII 172, and 185; and X 309.

Close: Kn HMs LD/NH (KSPI Q15 and Q17; PM IV fig. 544c; CS 49S).

### Stags

a) A group: I 181 from the Midea Tholos (LH III Ai context); and I 322 and 363, both from Pylos (LH III Bii–Ci context).

b) *Miscellaneous*: V 686 from Tanagra T. 31 (LH III A–B context); HM 1863 from Sellopoulo T. 1 (LM III Aii–B context; AR 1957 pl. 1j); and Cabinet des Médailles (Schlumberger Coll.) 43 (Pini, JDI 95, 1980, 77–108 no. A6).

### Caprid

I 487 from Crete.

### Dogs

VII 249; HM 1583; and a lentoid once in the Evans Collection (GGFR pl. 115).

### Quadruped

I 394 from Perati T. 1 (LH III C context).

### Minotaurs

*An artist in here?*: IX 227 from central Crete; XIII 34, and 61; and CS 322 (106 = PM IV fig. 587) from the Diktaian Cave, and 325 (CS fig. 128) from the Knossos area.

*Dependent* (The Glass Minotaur Forger; Pini, CMS Beiheft I 149–153, figs. 7a–8d): X 146, the matrix for the following glass seals: X 232; HM 3685; and an amygdaloid now in the Betts Collection.

## 14. Miscellaneous Seals

### Hard Stone Seals

*Lions*: I 115 from Mycenae T. 81, 182 from the Midea Tholos (LH III Ai context), and 290 from Pylos T. Delta; and V 2 from Aigina.

*Bulls*:

a) A group?: V 7 (though the face is damaged) from Aigina, and XII 225 from Crete?  
b) *Miscellaneous*: I 67 from Mycenae T. 27, 75 from Mycenae T. 42, 88 from Mycenae T. 55, 94 from Mycenae T. 58, 408 from the Dimini Tholos, and 493 (though the face is damaged) from Crete; VII 109; X 218, 222, and 249; CMCG 294; CS 247 and 249; HM 2236 from Mochlos (KretKhron 17, 1963, 354–356); and BSA Cast 182 said to be in Munich.

*Calf*: HM 916 from Tyliossos (ArchEph 1912, 215 pl. 16f).

*Agrimia*: X 167, 221, and 252.

*Agrimi kids*: I 222 from the Vapheio Tholos (LH IIA context); VII 179; and XIII 13D.

*Goats*: I 168 from the Clytemnestra Tholos (LH III A context); and CS 8P.

*Sheep*: I 48 from Mycenae T. 9, and 187 from the Midea Tholos (LH III A1 context); CS 309; and Oxford, Mississippi, University Museums J21 (unfinished; Hesperia Supplement 8 pp. 309–310 pl. 39 no. 5–5a).

*Miscellaneous caprids*: I 148 (Pini publishes a new photograph in JRGZM 28, 1981, 48–81 no. 12) from Mycenae T. 518 (LH I–II context); I Supp. 25 from the Argive Heraeum; and XII 298 from Crete?

*Boar*: I 135 from Mycenae T. 103.

*Miscellaneous animals*: XII 309 from Crete.

*Genii*: XII 212 from Crete; and AGDS II Berlin 30 from Thessalonike.

*Griffins*: IV 58D from Crete; and CS 347.

*Babylonian Dragon*: I 167 from the Clytemnestra Tholos (LH III A context).

### Soft Stone Seals

*Bulls*: V 254 from Armenoi T. 27 (LM III Ai–ii context), 399 from Medeon T. 239 (LH III C context), and 497 from the Temple, Ayia Irini in Keos; VIII 82; X 171; XIII 133; CS 371, and 18P from Rethymnon; HM 59 from Knossos (ArchEph 1907 pl. 7.72), 79, 228 from Knossos (ArchEph 1907 pl. 8.128), and 1646.

*Associated Sealings*: I 329, 334, 336, 337?, 380, and I Supp. 174, all from Pylos (LH III Bii–C1 context).